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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Claudio Lacagnina

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,364	Applicant(s) LACAGNINA, CLAUDIO	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/6/05; 3/20/07; 8/7/07</u> . | 6) <input type="checkbox"/> Other: ____. |

1. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the last line of claim 36, reference is made to a position in which the auxiliary drum interacts with "devices for disposing the belt structure" - it however is not clear if these are the same as the "devices for applying belt layers" as defined in line 2. As it would seem that these are intended to refer to the same devices, it would be clearer if consistent terminology were adopted.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19-23 and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hollmann (US 4,283,241).

As to claim 19, Hollmann discloses a method of assembling tyres for vehicle wheels, comprising: disposing a carcass structure on a primary drum (104 in esp. fig. 3); disposing a belt structure on an auxiliary drum (84); picking up the belt structure from the auxiliary drum to transfer the belt structure to a position coaxially centered with

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respect to the carcass structure (figs. 3-3a); and applying a tread band onto the belt structure (figs. 2a/2b); wherein the carcass structure comprises at least one carcass ply in engagement with annular anchoring structures (16, 56) axially spaced apart from each other, wherein the belt structure comprises at least one belt layer (90/92), and wherein applying the tread band is carried out by winding up at least one continuous strip element (96) of elastomer material in contiguous circumferential coils around the belt structure. A process as required by claim 19 is therefore anticipated by this disclosure.

As to claim 30, Hollmann discloses an apparatus for assembling tyres for vehicle wheels, comprising: a primary drum (104); an auxiliary drum (84); at least one unit (94) for applying a tread band (96) onto a belt structure (90/92); and a transfer member (106); wherein the primary drum is arranged to support a carcass structure, wherein the carcass structure comprises at least one carcass ply (44) in engagement with annular anchoring structures (16, 56) axially spaced apart from each other, wherein the auxiliary drum is set to carry the belt structure, wherein the transfer member moves the belt structure from the auxiliary drum to the primary drum (figs. 3-3a), wherein the at least one unit for applying the tread band comprises at least one delivery member, and wherein the at least one delivery member lays down at least one continuous strip element (96; figs. 2a-2b) of elastomer material in contiguous circumferential coils onto the belt structure. An apparatus as required by claim 30 is therefore likewise anticipated.

As to claim 20, the tread is applied before being picked up/transferred. As to claim 21-22 and 31, the strip (96) for the tread is extruded simultaneously with winding and delivered relatively close to the belt on the auxiliary drum (84). As to claims 23 and 32, to wind the strip, the drum (84) is rotated and relative transverse displacements between the delivery member and drum are provided (e.g. col. 7, lines 34-38). As to claim 28, at least some carcass assembly occurs on drum (104) - e.g. note col. 8, lines 9-12. As to claim 29, note figs. 3-3a. As to claim 33, the auxiliary drum (84) is rotated relative to the extruder.

5. Claims 19-23, 26-33, 35 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (US 2001/0002608).

As to claim 19, Okada et al. discloses a method of assembling tyres for vehicle wheels, comprising: disposing a carcass structure on a primary drum (14 or 24); disposing a belt structure (106) on an auxiliary drum (34); picking up the belt structure from the auxiliary drum to transfer the belt structure to a position coaxially centered with respect to the carcass structure (paragraphs [0067]-[0068]; fig. 6b); and applying a tread band onto the belt structure (fig. 5); wherein the carcass structure comprises at least one carcass ply in engagement with annular anchoring structures axially spaced apart from each other (e.g. fig. 6a), wherein the belt structure comprises at least one belt layer (151/152), and wherein applying the tread band is carried out by winding up at least one continuous strip element of elastomer material in contiguous circumferential coils around the belt structure (figs. 5c-5d). A method as required by claim 19 is therefore anticipated by Okada et al.

As to claim 30, Okada et al. discloses an apparatus for assembling tyres for vehicle wheels, comprising: a primary drum (24); an auxiliary drum (34); at least one unit (110) for applying a tread band onto a belt structure; and a transfer member (50); wherein the primary drum (24) is arranged to support a carcass structure, wherein the carcass structure comprises at least one carcass ply in engagement with annular anchoring structures axially spaced apart from each other (e.g. fig. 6a), wherein the auxiliary drum (34) is set to carry the belt structure, wherein the transfer member moves the belt structure from the auxiliary drum to the primary drum (paragraph [0067]), wherein the at least one unit for applying the tread band comprises at least one delivery member(110), and wherein the at least one delivery member lays down at least one continuous strip element of elastomer material in contiguous circumferential coils onto the belt structure (figs 5c-5d). An apparatus as required by claim 30 is therefore anticipated by Okada et al.

As to claim 20, the tread is applied before being picked up/transferred. As to claim 21-22 and 31, the strip for the tread is extruded simultaneously with winding and delivered (through 125) relatively close to the belt on the auxiliary drum (34). As to claims 23 and 32, to wind the strip, the drum (34) is rotated and relative transverse displacements between the delivery member and drum are provided (e.g. paragraph [0055]). As to claims 26-27 and 35-36, the drum (34) is moved between the belt conveyor (101) and rubber extruders (110). As to claim 28, the components parts of the carcass are assembled at least on drum (14), which drum can be termed a primary

drum. As to claim 29, note fig. 6b. As to claim 33, the auxiliary drum (34) is rotated relative to the extruder (110).

6. Claims 24, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollmann (US 4,283,241) or Okada et al. (US 2001/0002608) as applied above, and further in view of Caretta et al. (US 2001/0042586).

As to claims 24 and 25, Both Hollmann and Okada et al. effect the transverse displacements of the strip relative to the drum by moving the extruder rather than the drum. Caretta et al. is also directed to forming tire components by strip winding and teaches that

“it has been found that if the controlled relative displacements between the toroidal support and delivery member are carried out by directly moving the toroidal support, instead of the extruder or any other apparatus associated with the delivery member itself, important advantages can be achieved in terms of simplification of the production plants, operation flexibility and productivity, as a result of a reduction in working dead times.” (paragraph [0017]).

To carry out the required controlled relative displacements between the delivery member and the drum/support by moving the drum rather than the extruder would therefore have been obvious to simplify the plant and enhance flexibility/productivity, only the expected and predictable results being achieved. As to claim 34, Caretta et al. clearly suggests use of a robotized arm to effect these movements.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
April 9, 2008